From: Jon Rauscher
To: Eric Delgado
Cc: Marc Greenberg; Matthew Loesel; Paige Delgado; Philip Turner; R6 DWH REOC ESC@EPA; Valmichael Leos
Subject: Re: TPH and hydrocarbon test kits
Date: 05/28/2010 07:00 PM
Attachments: RaPID Assay User Guide.pdf

Depends on the boat. The boat will have to have a power hookup. If the boat has a DC electrical power (cigarette lighter), a DC/AC power convert could be used to provide a 110 volt electrical power supply. Greenberg and I have done fieldwork over last few years where we used an inverter to recharge batteries for hand drills, run a printer, and charge a notebook computer. Running the spectrophotometer in the test kit should not be a problem.

The information states that an operator with minimum chemistry skills can be trained to conduct the test. The reagents are dispensed using an Eppendorf Repeater Pipettor. The pipette dispenses a measured volume by pressing one button. Pipetting on a boat would be a little challenging but not impossible.

RaPID Assay User Guide.pdf

▼ Eric Delgado---05/28/2010 06:15:00 PM--- but do they work on a boat?

From: Eric Delgado/R6/USEPA/US
To: Marc Greenberg/ERT/R2/USEPA/US@EPA
Cc: Jon Rauscher/R6/USEPA/US@EPA, Matthew Loesel/R6/USEPA/US@EPA, Paige Delgado/R6/USEPA/US@EPA, Philip Turner/R6/USEPA/US@EPA, R6 DWH REOC ESC@EPA, Valmichael Leos/R6/USEPA/US@EPA
Date: 05/28/2010 06:15 PM
Subject: Re: TPH and hydrocarbon test kits

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but do they work on a boat?

Eric Delgado
Federal On-Scene Coordinator
US EPA Region 6
1445 Ross Ave (6SF-PR)
Suite 1200
Dallas, TX 75202
214-437-9809

-----Marc Greenberg/ERT/R2/USEPA/US wrote: -----

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To: Jon Rauscher/R6/USEPA/US@EPA
From: Marc Greenberg/ERT/R2/USEPA/US
Date: 05/28/2010 02:25PM
Cc: Eric Delgado/R6/USEPA/US@EPA, Matthew Loesel/R6/USEPA/US@EPA, Paige Delgado/R6/USEPA/US@EPA, Philip Turner/R6/USEPA/US@EPA, R6 DWH REOC ESC@EPA, Valmichael Leos/R6/USEPA/US@EPA
Subject: Re: TPH and hydrocarbon test kits
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Jon,

For what it's worth, I agree with your assessment below. Additionally, I have been involved on projects where our technicians used RaPID Assay Kits. They worked well.

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From: Jon Rauscher/R6/USEPA/US
To: Matthew Loesel/R6/USEPA/US@EPA, Valmichael Leos/R6/USEPA/US@EPA, Paige Delgado/R6/USEPA/US@EPA, Eric Delgado/R6/USEPA/US@EPA
Cc: Philip Turner/R6/USEPA/US@EPA, Marc Greenberg/ERT/R2/USEPA/US@EPA, R6 DWH REOC ESC@EPA
Date: 05/28/2010 12:21 PM
Subject: TPH and hydrocarbon test kits

The enzyme linked immunosorbant assays (ELISA) test kits appear to be the most promising field analysis. The colorimetric test kits using the Friedel-Crafts reaction (e.g., Hanby Test Kit) receive poor evaluations and do not appear to be promising for field analysis.

The ELISA test kit that received good evaluations is the SDI BTEX/TPH RaPID Assay Kits. The limitations of the RaPID kits is the need for electrical power (120 volt) and is the inability to differentiate between BTEX and related compounds.

[attachment "RaPID ASSAY t00102.pdf" deleted by Marc Greenberg/ERT/R2/USEPA/US] [attachment "CTPN200525_RaPID BTEXandTPH.pdf" deleted by Marc Greenberg/ERT/R2/USEPA/US]